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ATTORNEY DOCKET NO FIRST NAMED INVENTOR APPLICATION NO. **FILING DATE** 09/214,923 04/20/99 WALDENSTROM M 024444-580 **EXAMINER** 021839 IM22/0523 BURNS DOANE SWECKER & MATHIS TURNER, A P 0 BOX 1404 **ART UNIT** PAPER NUMBER ALEXANDRIA VA 22313-1404 1775 **DATE MAILED:** 05/23/00

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 2/95)

Commissioner of Patents and Trademarks

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| — | Application No. | Applicant(s) |
| Office Action Summary | 09/214,923 | Waldenstrom et al |
| | Examiner | Art Unit |
| | Archene A. Turner | 1775 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | |
| Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Status | | |
| 1)⊠ Responsive to communication(s) filed on 20 April 1999 . | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Th | is action is non-final. | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | |
| Disposition of Claims | | |
| 4)⊠ Claim(s) <u>1-2</u> is/are pending in the application. | | |
| 4a) Of the above claim(s) is/are withdra | wn from consideration. | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1 and 2</u> is/are rejected. | | |
| 7) Claim(s) is/are objected to. | | |
| 8) Claims are subject to restriction and/or | r election requirement. | |
| Application Papers | | |
| 9) The specification is objected to by the Examine | er. | |
| 10) The drawing(s) filed on is/are objected to by the Examiner. | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved. | | |
| 12) The oath or declaration is objected to by the Examiner. | | |
| Driority under 25 U.S.C. a 440 | | |
| Priority under 35 U.S.C. § 119 | |) (J) |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a)⊠ All b)□ Some * c)□ None of the CERTIFIED copies of the priority documents have been: | | |
| a)⊠ All b) Some * c) None of the CERTIF 1. received. | TED copies of the priority docume | ents have been: |
| 2. received in Application No. (Series Cod | e / Serial Number) | |
| 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | d. |
| 14) Acknowledgement is made of a claim for dome | estic priority under 35 U.S.C. & 11 | 9(e). |
| Attachment(s) | | |
| 15) Notice of References Cited (PTO-892) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 19) Notice of Informal | ry (PTO-413) Paper No(s) Patent Application (PTO-152) |

Application/Control Number: 09/214,923

Art Unit: 1775

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Haglund et al (5,151,247) or Timm et al (4,923,512) or Shimada et al (5,288,676) or lier et al (3,660,050) or Hitachi (English abstracts of JP61110745 or JP95011049) or Toshiba Tungalloy (English abstract of JP95065183) or Kobe Steel (English abstract of JP9125185).

The above references disclose a tungsten carbide having the claimed grain size and binder content. The claimed CW-ratio and saturation is considered inherent.

3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by NGK Spark Plug (English abstract of JP6335808).

NGK Spark Plug discloses a tungsten carbide having the claimed grain size and binder content. The claimed CW-ratio and saturation is considered inherent. The carbide may be coated with multiple coating including alumina and titanium carbonitride. The crystal orientations of the layers are considered inherent.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by McCandlish et al (5,81,045).

Page 3

Application/Control Number: 09/214,923

Art Unit: 1775

McCandlish disclose a tungsten carbide having the claimed grain size and binder content. The claimed CW-ratio and saturation is considered inherent.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haglund et al or Timm et al) or Shimada et al or Iier et al or Hitachi or Toshiba or Kobe Steel or McCandlish et al (as before) as applied to claim 1 above, and further in view of Ljungberg et al (5,487,625).

The above primary references disclose the invention substantially ass claimed except for the claimed coating.

Ljungberg et al discloses the claimed coating on a carbide substrate. The crystal orientation of the TiCN is considered inherent.

It would have been obvious to one of ordinary skill in the art to coat the primary references with the claimed coatings, as this technique is known in the tool art to provide improved performance, as shown by Ljungberg et al.

7. Any inquiry regarding this communication or earlier communications from the Examiner should be directed to Archene Turner, whose telephone number is (703) 308-4344. The Examiner can normally be reached Monday to Thursday from 8:30 AM to 6:00 PM.

Page 4

Application/Control Number: 09/214,923

Art Unit: 1775

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A facsimile center has been established in Group 1700, Crystal Plaza 2, 8th floor, reception area. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 305-3599 (for official after final faxes) or (703) 305-5408 (for all other official faxes). This location should be used in all instances when faxing any correspondence to Art Unit 1775. Use of the Group 1700 center will facilitate rapid delivery of materials to Examiners in Art Unit 1775.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

A. A. Turner Primary Examiner Group 1700

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